

# DOE ENERGY STORAGE SYSTEMS RESEARCH

## ANNUAL PEER REVIEW AGENDA

November 19-20, 2002  
Jurys Washington Hotel  
1500 New Hampshire Avenue, NW  
Washington, DC 20036

Tuesday, November 19, 2002 – *Burlington Ballroom, 1<sup>st</sup> Floor*

- 7:45 AM      **Continental Breakfast**
- 8:30          **Welcome and Overview** – Dr. Imre Gyuk, U.S. Department of Energy
- 8:40          **DOE Perspective** – William Parks, U.S. Department of Energy
- 9:00          **CEC Perspective** – Terry Surles, California Energy Commission
- 9:20          **ESS Program Overview** – John Boyes, Sandia National Laboratories
- 9:40          **Study of Second Use of EV Batteries in Stationary Applications** – Irwin Weinstock, Sentech, Inc.
- 10:00        **Short vs. Long Term Energy Storage Applications & Technologies Analysis** – Susan Schoenung, Longitude 122 West, Inc.
- 10:20        **Large Scale System Monitoring of Regenesys & NAS Battery Systems** – John Boyes, Sandia National Laboratories
- 10:40        **Break**
- 11:00        **Integration and Testing of Energy Storage with FACTS Devices** – Dr. Mariesa Crow, University of Missouri-Rolla
- 11:20        **ETO Switch Development of Power Conditioning System** – Dr. Alex Huang, Center for Power Electronics Systems, Virginia Tech
- 11:40        **ETO Switch Testing** – Patrick McGinnis, P.E., Naval Surface Warfare Center, Carderock Division
- 12:00        **Lunch on your own**

- 1:00 PM**      **PV/Hybrid Systems Field Test Monitoring at STAR Test Facility** – Robert Hammond, Arizona State University - East
- 1:20**            **Alternative Renewable Generation System Designs to Improve Battery Performance** - Dr. Phil Symons, EECI, Inc.
- 1:40**            **Alaska Battery/Diesel Hybrid System** – Dennis Meiners, Alaska Energy Authority, University of Alaska – Fairbanks
- 2:00**            **Break**
- 2:20**            **Zinc Bromine Utility Site Tests** – Greg Nelson, ZBB Energy Corporation
- 2:40**            **Li Ion Battery Energy Storage System (BES)** – Dr. Salah Oweis, SAFT America, Inc.
- 3:00**            **Evaluating Bulk Energy Storage to Relieve Transmission Congestion on the Island of Hawaii (Hawaii SEP Project)** – Jon Hurwitch, Sentechn, Inc.
- 3:20**            **PV-Battery System for Transmission Management (Illinois SEP Project)** - Dr. Mohammad Shahidehpour, Illinois Institute of Technology
- 3:40**            **Break**
- 4:00 – 5:30**    Electricity Storage Association Mini Meeting: **ELECTRICITY STORAGE AND CONFIDENCE IN YOUR POWER SUPPLY** - Keynote address by Rusi Patel of Xenergy
- 5:30 – 7:00**    **Reception hosted by ESA** – *Westbury Room, 1<sup>st</sup> Floor*

**Wednesday, November 20, 2002** – *Burlington Ballroom, 1<sup>st</sup> Floor*

- 7:45 AM**      **Continental Breakfast**
- 8:30**            **Development of a Bipolar Nickel Metal Hybrid Battery** – Mike Eskra, Electro Energy, Inc.
- 8:50**            **Super Conducting Flywheel Development** – Art Day, Boeing Phantom Works
- 9:10**            **Improved Flywheel Rotor, Design and Testing** – Dr. Robert Bartlett, AFS Trinity Power Corporation
- 9:30**            **Testing of Super Capacitors for Model Validation** – Dr. Satish Ranade, New Mexico State University
- 9:50**            **Testing of Super Capacitors** – Tom Hund, Sandia National Laboratories

- 10:10**      **Break**
- 10:30**      **[Optically Isolated High Voltage IGBT Inverter](#)** – Paul Duncan, Airak, Inc.
- 10:50**      **[Nanostructured Electrodes for High Rate Energy Storage Devices](#)** – Dr. Amit Singhal, Nanopowder Technologies
- 11:10**      **[Development of Intelligent Power Conditioning System for Renewable Generation Systems](#)** – Robert Wills, Intergrid Consulting
- 11:30**      **[Inverter Development & Reliability Improvement](#)** – Russ Bonn, Sandia National Laboratories
- 11:50**      **Lunch on your own**
- 1:00 PM**      **[I-GRID Power Quality Monitoring Project and the Value of Power Quality](#)** – Joe Eto, Lawrence Berkeley National Laboratory
- 1:20**      **[Vernon & Metlakatla VRLA Battery Monitoring](#)** – George Hunt, GNB Industrial Power, Division of Exide Technologies
- 1:40**      **[Modeling of Lead Acid Batteries](#)** – Bor Yann Liaw, University of Hawaii
- 2:00**      **[Status Report on the Peru Remote Area Power Systems Tests](#)** – Jerry Cole, International Lead Zinc Research Organization, Inc. (ILZRO)
- 2:20**      **Break**
- 2:40**      **[DER/Battery System Simulator Results](#)** – Ndeye Fall, Energetics, Inc.
- 3:00**      **[Business Strategies for Innovative Storage Market Opportunities](#)** – Joe Iannucci, Distributed Utility Associates
- 3:20**      **Conclusions** – Dr. Imre Gyuk, U.S. Department of Energy